Remarks

In view of the above amendments and the following remarks, reconsideration and further examination are requested.

The specification and abstract have been reviewed and revised to make a number of editorial revisions. No new matter has been added.

In addition, claims 1, 3-7 and 9-12 have been amended to make a number of editorial revisions. These revisions have been made to place the claims in better U.S. form. None of these amendments have been made to narrow the scope of protection of the claims, nor to address issues related to patentability and therefore, these amendments should not be construed as limiting the scope of equivalents of the claimed features offered by the Doctrine of Equivalents.

Claims 1, 2, 4-8, 10 and 11 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ryan (US 5,513,260) in view of Kajiyama (US 2001/0006771). Claims 3, 9 and 12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ryan in view of Kajiyama and further in view of Quinnett (US 6,615,160).

These rejections are respectfully traversed and submitted to be inapplicable to the claims for the following reasons.

Claim 1 is patentable over the combination of Ryan and Kajiyama, since claim 1 recites a recording apparatus having an accepting unit operable to accept from a user an indication whether an optical disk is intended for consumer or industrial use; an encrypting unit operable to encrypt digital content, using a different encryption method depending on whether the optical disk is intended for consumer use or industrial use; a first writing unit operable to, when the optical disk is intended for consumer use, (a) generate a first area on the optical disk, and (b) write the encrypted digital content to the first area; and a second writing unit operable to, when the optical disk is intended for industrial use, (a) generate a first area and a second area on the optical disk, (b) write the encrypted digital content to the second area, and (c) write message data to the first area, wherein the message data indicates that the digital content cannot be reproduced by a consumer reproduction apparatus. The combination of Ryan and Kajiyama fails to disclose or suggest any of these features of claim 1.

Ryan discloses a copy protection recording apparatus 10 having a symmetrical encryptor 22, an authenticating signal generator 29, a switch 24 having first and second poles S1a, S1b, and

an asymmetrical encryptor 25. An unencrypted digital data stream received by the apparatus 10 is input to the symmetrical encryptor 22 and the OFF input of the first pole S1a of the switch 24. The symmetrical encryptor 22 encrypts the data stream using a key K and outputs the symmetrically encrypted data stream to the ON input of the first pole S1a of the switch 24. The authenticating signature generator 29 generates an authentication signature and supplies it to the ON input of the second pole S1b of the switch 24. The OFF input of the second pole S1b is grounded.

When copy protection is to be used, the switch 24 is manipulated such that the ON inputs of the poles S1a and S1b are selected for output. Therefore, the symmetrically encrypted data stream is input to the asymmetrical encryptor 25 to be asymmetrically encrypted with the key P prior to be written on a disc. Further, the authentication signature is output and written on the disc. If copy protection is not to be used, the switch 24 is manipulated such that the OFF inputs of the poles S1a and S1b are selected for output. Thus, the unencrypted data stream is input to the asymmetrical encryptor 25 to be asymmetrically encrypted with the key P for output to disc and no authentication signature is output.

The result of using the apparatus 10 when decoding the copy protected data stream (the data stream that is both symmetrically and asymmetrically encrypted) is such that a reproducing device will only output the symmetrically decrypted data stream when the authentication signature is present. In other words, if the data stream is copy protected and no authentication signature is present, the reproduction apparatus will know that the data stream is unauthorized and not properly reproduce it. Further, the reproduction device will display a copyright message indicating that the copy is authorized. (See column 5, line 22 - column 6, line 34; column 8, lines 11-18 and Figure 1 and 2).

Based on the above discussion, it is apparent that the apparatus 10 of Ryan encrypts the data stream in different ways prior to recording it on a disc depending on whether or not copy protection is to be used. Ryan fails to disclose or suggest that the decision of how the data stream is to be encrypted and recorded is based on the usage of the disc (i.e., for consumer or industrial use) to which it is to be recorded. In fact, Ryan fails to even consider whether the disc on which the data stream is to be recorded is for consumer or industrial use. Therefore, as admitted in the rejection, Ryan fails to disclose or suggest an accepting unit as recited in claim 1.

Also, Ryan fails to disclose or suggest an encrypting unit operable to encrypt the digital content, using a different encryption method depending on whether the optical disc is intended for consumer use or industrial use. Again, since Ryan fails to consider the usage of the disc as recited in claim 1, it necessarily fails to disclose or suggest an encrypting unit that uses different encryption methods depending on the usage of the disc.

Further, in Ryan, the data stream is written onto the disc in the same manner regardless of whether or not the data stream is encrypted and does not consider the usage of the disc. Therefore, Ryan also fails to disclose or suggest a first writing unit operable to, when the optical disk is intended for consumer use, (a) generate a first area on the optical disk, and (b) write the encrypted digital data content to the first area, and a second writing unit operable to, when the optical disc is intended for industrial use, (a) generate the first area and a second area on the optical disk, (b) write the encrypted digital data content to the second area, and (c) write message data to the first area.

In addition, while Ryan does disclose that the reproduction device will display a copyright message indicating that the data stream on a disc is an unauthorized data stream, Ryan fails to disclose or suggest that the copyright message is stored on the disc as is the case in claim 1. Instead, it appears that the reproduction device itself generates the copyright message when it determines that the data steam on the disc is unauthorized. As a result, Ryan also fails to disclose or suggest this feature.

In light of the above deficiencies of Ryan, it is necessary for Kajiyama to disclose or suggest these features in order for the combination of Ryan and Kajiyama to render claim 1 obvious.

Kajiyama discloses a storage medium playback system that uses a storage medium 1 (103) having a first storage area 1a and a second storage area 1b that are used to store different reproduction forms, such as sound versus video or different data formats. The system also generates a display screen 800 having three areas, including a command area 801, a selection list area 802, and an information area 803. The command area 801 displays the title of the storage medium 103, the title of the music or video being reproduced, and a number of buttons for controlling the reproduction of the music or video by a user. The selection area 802 is a selection box for displaying the list of music, video, etc. stored on the storage medium 103 that can be selected by the user. The information area 803 is an area for displaying general-purpose

information including text information and pictures related to music that has been selected to be reproduced. (See page 2, ¶ [0039]; page 5, ¶¶ [0084]-[0088]; page 9, ¶ [0143]; and Figures 1 and 8).

The rejection relies on Kajiyama as disclosing an accepting unit operable to accept from a user an indication of whether the optical disk is intended for consumer use or industrial use and the generation of first and second storage areas. However, while Kajiyama does disclose the general concepts of having two storage areas on a storage medium and a unit for excepting user commands, Kajiyama clearly fails to meet the specific limitations of claim 1 discussed above.

The system of Kajiyama does generate the display screen 800 which allows a user to select pieces of data stored on the disc that they wish to reproduce and control the reproduction of the selected pieces of data. However, there is no disclosure or suggestion in Kajiyama that the display screen 800 allows the user to submit an indication as to whether the disc itself is intended for consumer or industrial use. Kajiyama, like Ryan, also fails to disclose or suggest an encrypting unit operable to encrypt the digital content, using a different encryption method depending on whether the optical disc is intended for consumer use or industrial use.

As discussed above, Kajiyama does generally disclose that the storage medium 1 has the first storage area 1a and the second storage area 1b for storing different reproduction formats. However, it is apparent that Kajiyama fails to disclose or suggest the specifics of: when the storage medium 1 is intended for consumer use, (a) the first storage area 1a on the storage medium 1 is generated, and (b) encrypted digital data content is written to the first storage area 1a, and when the storage medium 1 is intended for industrial use, (a) the first storage area 1a and the second storage area 1b on generated on the storage medium 1, (b) encrypted digital data content is written to the second storage area 1b, and (c) message data is written to the first storage area 1a.

In addition, is it apparent that Kajiyama also fails to disclose or suggest that a copyright message is stored on the storage medium 1.

Based on the above discussion, it is apparent that Kajiyama fails to address the deficiencies of Ryan. Therefore, it is apparent that the combination of Ryan and Kajiyama fails to render claim 1 obvious.

It is noted that Quinnett is relied upon in the Office Action as disclosing displaying a message on a screen in different languages. However, Quinnett also fails to disclose or suggest the above-discussed features of claim 1.

As for claims 4, 7 and 10, they are patentable over the references relied upon in the rejections for reasons similar to those set forth above in support of claim 1. That is, claims 4, 7 and 10 recite features similar to those in claim 1, which are not disclosed or suggested in the references.

In addition to being patentable over the references relied upon in the rejections for the reasons set forth above in support of claim 1, claims 2, 8 and 11 further recite that the encryption method for consumer use is to encrypt the digital content using a first content key which is to be encrypted using a disk key unique to the optical disk, and the encryption method for industrial use is to encrypt the digital content using a second content key which is to be encrypted using a device key unique to an industrial reproduction apparatus. It is apparent that Ryan, Kajiyama and Quinnett all fail to disclose or suggest the specific attributes of the encryption method for consumer use and the encryption method for industrial use recited in these claims.

Claim 5 is patentable over the combination of Ryan and Kajiyama, since claim 5 recites an optical disk that has a first area and a second area, and is intended for consumer use or industrial use, wherein digital content is recorded in the first area if the optical disk is intended for consumer use, and the digital content is recorded in the second area and message data is recorded in the first area, if the optical disk is intended for industrial use, and wherein the message data indicates that the digital content cannot be reproduced by a consumer reproduction apparatus. The combination of Ryan and Kajiyama fails to disclose or suggest these features.

As discussed above, Ryan discloses that when copy protection is to be used, the symmetrically encrypted data stream is asymmetrically encrypted and is then written on the disc with the authentication signature, and when copy protection is not to be used, the unencrypted data stream is asymmetrically encrypted and is written on the disc without the authentication signature. Therefore, if the data stream is copy protected and no authentication signature is present, the reproduction apparatus will know that the data stream is unauthorized, not properly reproduce the data stream, and display a copyright message indicating that the stream is unauthorized. (See column 5, line 22 - column 6, line 34; column 8, lines 11-18 and Figure 1 and 2).

However, Ryan fails to disclose or suggest that the disc on which the data stream is recorded has a first area and a second area, or consider whether the disc on which the data stream is to be recorded is for consumer or industrial use. Therefore, Ryan necessarily fails to disclose that the data stream is recorded in the first area if the optical disk is intended for consumer use, and the digital content is recorded in the second area and message data is recorded in the first area, if the optical disk is intended for industrial use. Further, it is apparent that Ryan fails to disclose or suggest that the copyright message is recorded anywhere on the disc. Since Ryan fails to disclose or suggest these features of claim 5, it is necessary for Kajiyama to disclose or suggest these features in order for the combination of these references to render claim 5 obvious.

As discussed above, Kajiyama discloses the general concept of having the storage medium 1 (103) with the first storage area 1a and the second storage area 1b that are used to store different reproduction forms, such as sound versus video or different data formats. (See page 2, ¶ [0039]; page 5, ¶¶ [0084]-[0088]; page 9, ¶ [0143]; and Figures 1 and 8). However, it is apparent that Kajiyama fails to disclose or suggest the specifics that: the data stream is recorded in the first area if the optical disk is intended for consumer use, and the digital content is recorded in the second area and message data is recorded in the first area, if the optical disk is intended for industrial use. As a result, the combination of Ryan and Kajiyama fails to render claim 5 obvious.

Also, it is noted that Quinnett also fails to disclose or suggest the above-discussed features of claim 5.

As for claim 6, it is patentable over the references relied upon in the rejections for reasons similar to those set forth above in support of claim 5. That is, claim 6 recites features similar to those in claim 5, which are not disclosed or suggested in the references.

Because of the above mentioned distinctions, it is believed clear that claims 1-12 are patentable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1-12. Therefore, it is submitted that claims 1-12 are clearly allowable over the prior art of record.

In view of the above-amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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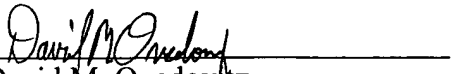
By: 

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